

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-010691**Date Inspected:** 11-Dec-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

During the Quality Assurance random Visual Inspection (VT) of segment 11EE, PJP weld joining Floor Beam (FB) Vertical Flange (X7J) to Longitudinal Diaphragm (LD) Flange, located on Segment 11EE, this Quality Assurance Inspector (QA) discovered the following issues:

-The end of FB vertical flange trimmed by ZPMC. According to approved drawing the vertical flange has 50 radius and 144 mm in length. Because of dimensional problem in fit-up, ZPMC trimmed the 50 mm radius, which reduces the length less than 144 mm. This does not comply with approved drawing X-7J. The measured length and weld numbers are as below.

-The weld is identified as:

1. -Seg074B-006, @ Panel Point (PP)-107, Length is 105 mm.
2. -Seg074B-007, @ Panel Point (PP)-108, Length is 115 mm.
3. -Seg074B-008, @ Panel Point (PP)-108, Length is 110 mm.
4. -Seg074C-009, @ Panel Point (PP)-108, Length is 120 mm.
5. -Seg074C-010, @ Panel Point (PP)-108, Length is 110 mm.
6. -Seg074C-015, @ Panel Point (PP)-107, Length is 115 mm.

-The Weld is a Partial Joint Penetration (PJP) Weld joining the:

1. -Floor Beam (FB) Vertical Flange to Longitudinal Diaphragm (LD) Flange

-The OBG Segment is located at OBG Bay#14.

For further information, please see the attached pictures below. Please see incident report on this date

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bay#13

SMAW welding of weld joint Seg068*-045 located on Segment 11BE. Welder is identified as 200113 (4G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg068*-046 located on Segment 11BE. Welder is identified as 037996 (4G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg068*-047 located on Segment 11BE. Welder is identified as 044772 (4G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-Tc-U4b-FCM-1.

FCAW welding of weld joint SSD13-PP102-005 located on Segment 11CW. Welder is identified as 055564 (2F). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232.

FCAW welding of weld joint SSD14-PP101-005 located on Segment 11CW. Welder is identified as 055491 (2F). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232.

FCAW +SAW welding of weld joint Seg065*-004 located on Segment 11AW. Welder is identified as 048038 and 058100 (1G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-223(2)1T-2.

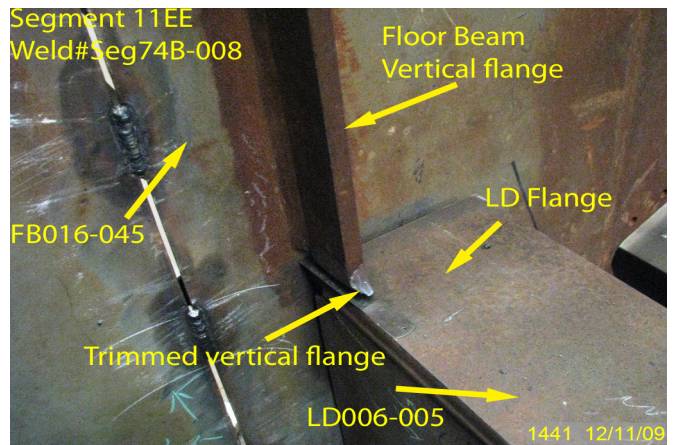
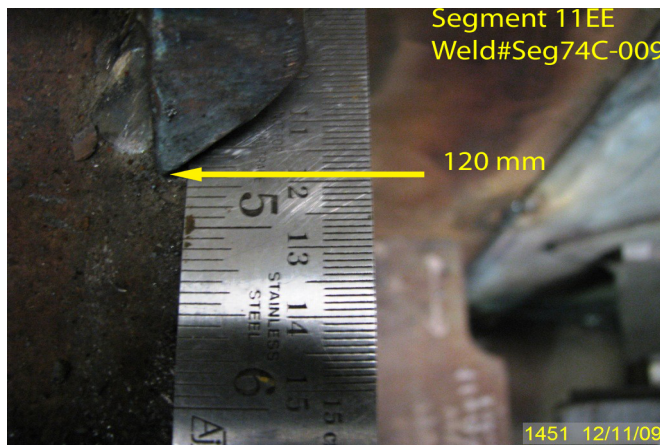
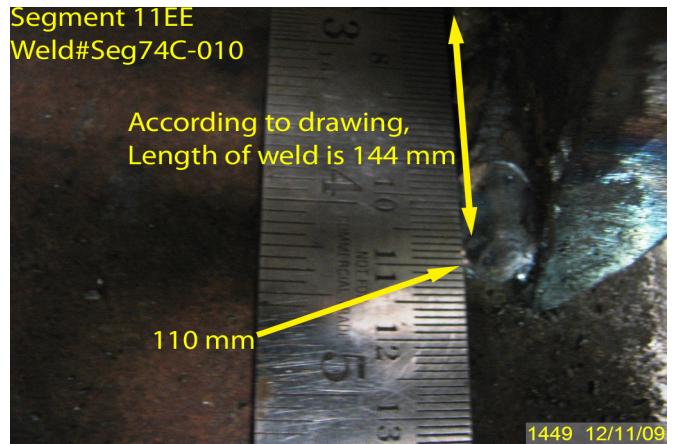
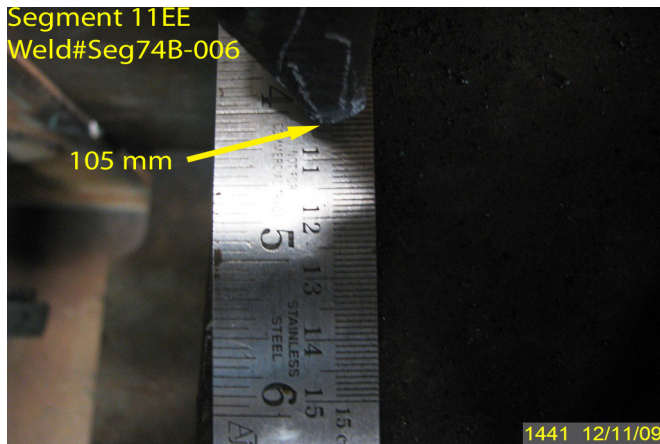
FCAW welding of weld joint Seg068*-012 located on Segment 11BE. Welder is identified as 051356 (3G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

FCAW welding of weld joint Seg068*-009 located on Segment 11BE. Welder is identified as 058551 (3G). ZPMC QC is identified as Guo Xing Hai. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-B-U2-F.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel,Hiranch	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer